

ABSTRACT

A playback apparatus for use in a reproducing system is disclosed. The playback apparatus includes a number of conventional elements including a memory configured to store data to be read from a data source, a presentation unit configured to retrieve one or more data blocks from the memory for presentation to a user and a controller configured to manage the contents of the memory and control the operations of said data source. In addition to the conventional elements, the controller further comprises an access prediction unit comprised of a ranking unit and a candidate identifier unit. The candidate identifier unit is configured to select a set of candidate blocks (at least two data blocks) from a plurality of data blocks stored on the data source for consideration by the ranking unit. The ranking unit is operable to rank the desirability of a set of candidate blocks from among the plurality of data blocks stored on the data source. In one embodiment, the ranking unit assigns a desirability ranking based on criteria comprising: (i) each of the at least two candidate data blocks predicted future use in at least two play modes and (ii) the relative ranking of the at least two of play modes.